



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,644	06/20/2006	Johannes De Wilde	NL04 1251 US1	8785
65913	7590	05/22/2009		
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			EXAMINER HOLLINGTON, JERMELE M	
			ART UNIT 2829	PAPER NUMBER
			NOTIFICATION DATE 05/22/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

## DETAILED ADVISORY ACTION

### *Response to Arguments*

1. Applicant's arguments filed May 11, 2009 have been fully considered but they are not persuasive as shown below.

a) Regarding to "Objections to the Drawings", the applicants' state: *"Since the current application is a U.S. National Stage application, Applicants assert that the drawing requirements for U.S. National Stage applications are identified in MPEP 1825 and labeling of figures as "Prior Art" is not required (see PCT Rule 11.11)."*

In response to the above arguments, PCT Rule 11.11 states: *"The drawings shall not contain text matter, except a single word or words, when absolutely indispensable... a few short catchwords indispensable for understanding."* MPEP 608.02 (g) states: *"...where needed to understand applicant's invention, they may be retained if designated by a legend such as "Prior Art.""* Base on the above citations, the examiner believes the label "Prior Art" is indispensable since it shows a user that Fig. 2 is not part of the claimed invention.

b) Regarding claim 1, the applicants' state: *"Daughton does not disclose a current sensing device that is integrated into a semiconductor device where the current to be measured is generated. Daughton merely discloses a current sensing device with bonding pad interconnects that can be used to connect a device with a current that needs to be measured to the current sensing device. Daughton, col. 18, lines 55-60. In other words, the current sensing device disclosed in Daughton is designed to be a device that is external to the device generating the current to be sensed, not integrated into the device."*

In response to the above arguments, the examiner disagrees. Claim 1 states: *"...wherein the current sensing device is integrated in the semiconductor device where the current to be measured is generated..."* The position of the examiner with this limitation is that the current is being generated by the semiconductor device. The claim does not provide any detail on what part of

Art Unit: 2829

the device is generating the current. The question remains does the current sensing device is integrated in the semiconductor device in Daughton? The examiner answer is yes. Daughton disclosed in col. 10, lines 64-65: "As indicated above, the current sensing structure is typically provided on a semiconductor chip, 10, having suitable operating circuitry for the sensor provided therein." Furthermore, the abstract of Daughton teach the above limitation in question. In the abstract, it states: "...a current sensor supported on a substrate electrically isolated from one another but with the sensor positioned in the magnetic fields arising about the input conductor due to any input currents..." and "The sensor can be electrically connected to a electronic circuitry formed in the substrate as a monolithic integrated circuit..."

Base on the above arguments, the examiner believes the prior art still reads on the claimed invention.

c) Regarding claim 2, the applicants' states: *"In regard to claim 2, Applicants respectfully submit that claim 2 is patentable over Daughton because Daughton does not disclose all the limitations of the claim. Claim 2 recites "A semiconductor device according to claim 1, wherein the current sensor is suitable for measuring current with a  $\mu A$  resolution" (emphasis added)."*

In response to the above arguments, while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone. See MPEP 2114. The examiner believes the prior art still reads on the claimed invention since the structure of the prior art current sensor and the claimed invention current sensor is not different form each other.

Art Unit: 2829

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:00 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on (571) 272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jermele M. Hollington/  
Primary Examiner  
Art Unit 2829

/J. M. H./  
May 19, 2009